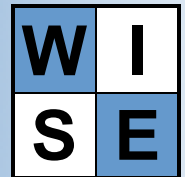


# DB2 UDB for z/OS: Tuning the DB2 Pools (Buffer, EDM, RID & Sort)



WISE LTD.

- COURSE CODE:** DZOBUF
- COURSE TITLE:** Tuning the DB2 Pools (Buffer, EDM, RID & Sort)
- AUDIENCE:** Administrators, System Administrators and Capacity Planners.
- PREREQUISITES:** Working knowledge of the five (5) DB2 address spaces and DB2 objects and data sets.
- DURATION:** 1 day
- SUMMARY:** This course explores useful ways to monitor and tune the DB2 virtual, EDM, RID and SORT pools. After discussing the constraints of the ssnmDBM1 address space and its 2GB (until z/OS) addressing limit, the presentation focuses on the following:
- Buffer pools vs. hiper pools
  - Buffer pools vs. data spaces
  - Synchronous vs. asynchronous reads and writes
  - Table space/index space buffer assignment
  - Thresholds
  - Size and number of buffers
  - Page stealing algorithms
  - Using online commands to monitor and tune buffers
  - Using buffer pool statistics to monitor and tune buffers
- OBJECTIVES:** Upon completion of this presentation, the participant should be able to use monitoring tools such as the -DISPLAY BUFFER POOL command to monitor and tune the DB2 buffers.



## 1. TERMS AND CONCEPTS

- DB2 Instrumentation Facility
- DB2 hardware environment
- DB2 address spaces
- TCBs vs. SRBs
- Thread types
- Connection services

## 2. BUFFER POOL – CONCEPTS

- Virtual pools
- Hiper pools
- Expanded storage
- Data spaces

## 3. BUFFER POOLS – I/O TYPES

- How to estimate size
- Synchronous vs. Asynchronous
- Prefetch
- Dynamic prefetch
- List prefetch and RID pool
- Parallelism
- Read and write engines
- How to monitor and tune all of the above

## 4. BUFFER POOL THRESHOLDS – SPECIAL TREATMENT

- How to optimise
- Fixed and alterable
- Hiper pool thresholds
- Write thresholds
- Prefetch thresholds
- How to monitor and tune all of the above

## 5. EDM POOL

- Function
- How to estimate size
- How to monitor and tune

## 6. SORT POOL

- How to estimate size
- Function
- How the RDS sort works
- How to monitor and tune